ON

SOME FORMS OF

INCREASED HARDNESS OF THE EYEBALL

ASSOCIATED WITH SYPHILIS

AND THEIR TREATMENT.

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P. M. Tosh

1894

Syphilis affects the eyes in many ways. They may be the seat of the initial lesion itself, or may be affected, as is much more commonly the case, with the secondary or tertiary symtoms of the acquired disease, while the hereditary taint frequently shows its most manifest results in the organ of vision. No part of the eye is free from its ravages. It may attack it acutely, or only show itself as a chronic disease which has seriously and permanently affected the sight before the patient has been cognisant of any particular trouble. Again, there are times when inflammatory action attacks parts that give rise to secondary troubles, and a new condition of affairs follow which are altogether of themselves foreign in a way to the primary trouble of the eye. and which are quite as serious, if not more so, than the original lesion. Such a train of events we can readily understand might arise should even a slight interference take place to the natural flow of currents within the eyes, and so

add another, and a most serious factor to an already troublesome complaint. In the interior of the normal eye there is, generally speaking, a natural flow of fluid from the posterior parts to the anterior through the pupil to find its way out at the angle formed by the junction of the Iris with the Cornea, and it is to the obstructed flow of this current, giving rise to increased pressure within the globe, so far as it is due to Syphilis, that I wish to restrict my attention. –

Let us considern first what the origin of the fluid is – where it comes from ? – It arises in great extent, if not in toto under normal conditions from the ciliary body and the glands contained therein, and passing through the Circumlental Space, or directly into the posterior chamber, easily finds its way through the pupil into the anterior chamber whence it filters through the Iritic angle and the ligamentum pectinatum into the Spaces of Fontana and so gets into the larger Lymph channels and vessels beyond.

Now amongst Syphilitic manifestations that shew themselves in the eye, Iritis is one of the most common. It shews itself very frequently as a secondary manifestation, and even in cases which are energetically treated for a long

time we see relapses following one another time and again in a way that it is difficult to understand, till at last the patient is often driven to despair in any treatment, and leaving things to take their own course for a time, returns with the pupil bound down posteriorly by a firm annular adhesion which atropin or leeches, mercury or iodide will never relieve, while the imprisoned fluid behind throws the body of the Iris forward into a bombé condition which in its new position and inflamed state, is most admirably suited to form a firm adhesion to the posterior surface of the cornea at its periphery, and in this way build up a second and more formidable barrier to the circulation of the fluids of the eye, which any operation will only imperfectly remove, and as a consequence do little good to in many instances as far as re-opening the infiltration angle is concerned. It is true the tension of the eye may in time go down to normal again in many cases, at the expense possibly of the ciliary body – though it does not always do so – but no appreciable improvement of sight returns with that decrease of tension in the great majority of patients even though their fundi remain practically normal.

In many cases we know the defect of sight is due to the organised lymph that often remains in the pupillary area in the affected eyes, but also there are many cases where such a cause does not exist, where in fact no lymph has been thrown out into that area, and where the media otherwise ~~and~~ are practically clear as far as can be made out, and the only remaining visible sign of past increase of pressure on the interior of the eye is a slight shelving and pallor of the Disc.

I first saw G. B. in December 1892 ; he had acquired Syphilis six years previously and for the last three years had suffered from repeated attacks of Iritis (over 20) although under constant supervision and treatment, and had been for some time an in-patient of a hospital under special treatment, – his V. now was in R $\frac{2}{60}$ in L $\frac{1}{60}$. There was an annular Synechia posterior in R with Bombé Iris and lymph in pupillary area : T+.

There was a like condition in the L. but no lymph in P. area – T+.

The eyes were at that time fairly quiet and he was advised to have Iridectomy performed in each, in the hope of preventing any further attack as far as possible as well as at the same time opening up a passage between

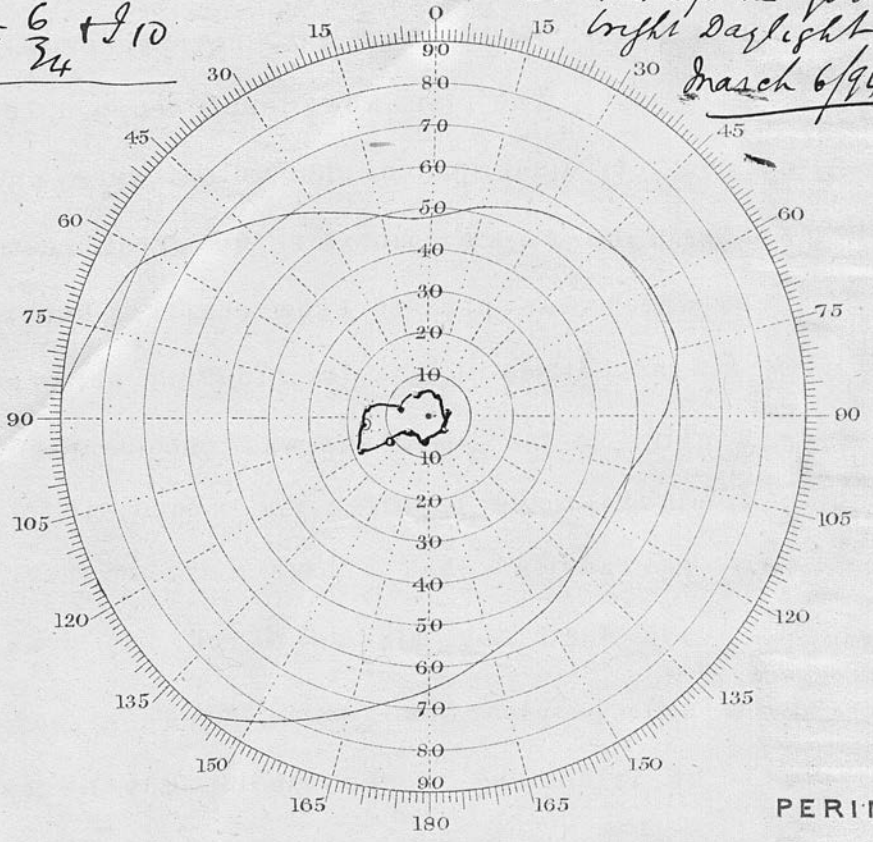
the anterior and posterior chambers. This he consented to and it was performed shortly after. V. rose in each to $\frac{6}{60}$ and nine months' subsequently to $\frac{6}{12}$ partly with both eyes together, but now he only sees $\frac{6}{36}$ with difficulty. Tension in this case certainly went down to normal after the operation and has remained so, but a subsequent relapse in both his eyes has thrown out a considerable amount of lymph in each pupillary area and the sight has not improved to anything like the extent that was hoped for with the decrease of tension. But on the other hand, the eyes have been comfortable and free of pain for some months' past, and he considers himself happy and well. On reflecting on this case, one cannot help thinking that had Iridectomy been done at an early period, the patient would have fared much better than he did, he probably would have been spared the discomfort of repeated attacks of Iritis – his pupils might have been clear – the interior circulation of his eye would have been maintained and the infiltration angle left unimpaired.

E. I. Aet. 39, came under my observation on March 6th. 1893. She had acquired Syphilis three years ago and had received special treatment for her eyes at that time. She now exhibited in her right eye a fine dusty

"Centre each chart with "pointer" at Zero before

Elz. Jackson aet 39 yrs LEFT. Fixed for White
@ 2 cm. Sq. in Good
bright Daylight
Jnasch 6/94

V. = 6/24 + J10



The eccentric continuous red line indicates the average normal Fiel

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vitrous opacity with disseminated choroidal changes at the periphery ; her P. was active, Tn, V= $\frac{6}{9}$ - & J 1.

L. eye a. c. shallow - Ring Synechia posterior, Iris slightly bombé. - P. area clear, T. full (or + 1) V. = $\frac{6}{24}$ & J 10, not improved.

The disc was deeply cupped, one or two patches of disseminated choroiditis were present, but would in no way account for the great restriction of field which was present (see chart) Under atropin her P. did not dilate in the least during her visit. The eye was quiet at the time, she was suffering no pain, and only complained of the impaired vision and mistiness. Iridectomy was advised, but I have not seen her since. In this case again the mischief is already done, although the pupil still is clear one cannot hope for any great improvement by Iridectomy - the tension may be relieved, the relapses of Iritis brought to an end by operation, and even the vision as I have several times noticed may greatly improve for a time, only to deteriorate again without evident cause, except it is the result of the increased pressure acting in some obscure way on the delicate nervous elements

of the retina or on the optic nerve itself, which in the Syphilitic may possibly be more prone to degenerative changes after such processes have occurred and only show their potency for evil in time.

H. C. whom I saw in February 1893 had suffered from interstitial Keratitis previously, and now came with Iris Bombé in each eye. A double Iridectomy was performed and repeated in the right – Partly due to lymph in P. and partly due to opacity of the Corneae the vision with both eyes together is not more than $\frac{2}{60}$. The eyes are quiet and remain so.

F. C. the subject of Hereditary Syphilis came with Bombé Iris and increased tension for which Iridectomy was performed in the right. The iris was so soft that only a small portion was removed at the periphery but tension decreased and after a time with her correction she got $\frac{6}{60}$. Subsequently Iridectomy was performed in the left, and a larger opening was effected and $\frac{6}{36}$ vision was obtained with correcting glass.

The Pathological anatomy of such cases exhibits nothing beyond what we would expect.

Through the kindness of Mr. T. Collins, I have had the opportunity of examining a number of specimens and of making sections of a few cases of this nature at the Moorfields laboratory, and one description would suit them all with but slight variations.

The cornea exhibits nothing peculiar in its substance though in some cases the remains of past inflammatory trouble can be traced, and ~~may be~~ an increase of the cells which cover its posterior surface towards the periphery may be present in some cases.

The iris substance is thinned and wasted and is adherent at its pupillary margin to the lens. The pupil is often blocked with old inflammatory exudation (which if it have existed for some time may have given rise to an opacity at the anterior pole of the lens) while the periphery of the Iris is thrown forward and has become attached to the posterior surface of the Cornea with some small celled exudation in this and the adjoining regions. –

The ciliary body is in a state of atrophy, and considerably shrunken in size.

The retina and choroid may exhibit patches of old inflammatory change or exudation and be adherent

at these points, or the former may have become detached and separate and may have developed cysts within its substance in old standing cases. – Shrinking of the vitrous was common. The optic disc shows the results of old pressure and is often deeply cupped.

In those cases in which Iridectomy had been performed the periphery of the iris had not been removed – the part adherent to the cornea still remained in its abnormal position, and often more firmly fixed by reason of its becoming entangled or prolapsing to some extent into the wound.

What are we to learn from these cases? One thing chiefly I think that Iridectomy to be of use must be done early – When relapse follows relapse as it occasionally ~~dies~~ does in those who have received the best of treatment and care, and not unfrequently in the poorer classes who consider themselves "better" when the pain has disappeared and leave off their treatment all too soon as a consequence, and where each succeeding attack of Iritis adds strength to the surely forming ring of attachment to the lens capsule as well as degeneration and softening the tissues of the iris itself, in these cases I think we should not wait for indications of increased ten-

sion but rather anticipate the condition and prevent the possibility of its arising.

In so doing we effect not only a temporary but a permanent good which would have been impossible if left till adhesions had formed to the cornea as well, but we would also prevent that defect of central vision which occurs in all cases sooner or later, as well as maintain the field of vision unimpaired by the ravages of increased tension: and in these cases where a bombé condition has been established we should I think perform as wide iridectomiès as possible, for at best the restoration of the angle is imperfect, and we aim at something which will perform the functions as far as possible of a whole and complete infiltration angle unimpaired as well as opening up a passage between the posterior and anterior chambers of the eye.

In these cases where there is total posterior synechia, and the Iris is bound down to the periphery of the cornea, it has I believe, been suggested to inject the anterior chamber with some antiseptic fluid, and so cause the Iris to be forcibly thrown backward in the hope of tearing it away to some extent from the back of the

cornea ; and certainly when this is done experimentally (e. g. in a globe after removal) the anterior chamber can be deepened to a great extent, and in recent cases where the adhesion is not yet firmly adherent, it may be possible to drag away the Iris from the cornea in this way, and in a subsequent iridectomy operation the iris might be removed at a more peripheral point than it otherwise would have been, and so make a considerable difference in increasing the permeability of the infiltration angle in an otherwise unfavourable case.

The field of vision is of little use to us in such cases, because of the frequent and serious disease at the posterior part of the eye. – We must rely mainly on our tactile sense to judge of the comparative hardness of the globe – look to the depth of the A. C. and the shape of the Iris – see if atropin is of use or not and form our opinion lastly from the history and symtoms in each particular case ~~what case~~ what course of treatment it is necessary to pursue.

As a second class of cases we may consider those which affect the ciliary region. And there are certain characters associated with them which render them somewhat peculiar.

Amongst these we must especially note not only the tendency to spread and involve other areas directly but also to give rise indirectly to nutritional changes in structures that have not been inflamed.

The iris and choroid are frequently affected at the same time to a greater or lesser degree, and may play an active part in themselves in any increase of tension that may arise, but we shall here consider how far increase of tension may result from the ciliary region alone so far as our cases permit. The inflammatory exudations (so called gummata) of secondary syphilis may have their seat here, and give rise, not only to an increased or altered secretion which the natural outlets are unable to carry away, but may also by direct extension affect the entire angle in that region, and even the more solid tunics of the eye themselves as was seen in the case of E. W. who came under observation while suffering from secondary symptoms. There had been previous

iritis on the right eye. The left, which she said had been affected over two months', exhibited a localized Staphyloma just outside upper part of the Sclero-Corneal margin as a result of the increased tension from which she suffered. The iris was drawn up into this protrusion, and the margin of the pupil could not be seen at this point. – The anterior chamber seemed of good depth – The V. = fingers at three inches. The field (by hand) appeared of good size. – Owing to the great pain in the globe it was excised.

In sections of this case the much atrophied iris was seen to be drawn into the staphyloma and to be adherent in this area – The pupillary margin extended no farther than the Corneal margin – as a consequence the rest of the iris was drawn upon, and one is forced to think, that an iridectomy might have been of benefit by relieving the tension on the iris and so more perfectly opening up the infiltration angle, and as a consequence of the relief of the pressure within the globe we might have expected the staphloma to decrease in size, and we would have allowed external pressure to have been applied with some considerable prospect of favourable result.

A somewhat different class of case is exemplified in the person of G. H. who suffered from keratitis

as well as irido-cyclitis and choroiditis – There was thinning of sclera in the ciliary region with one or two small localized bulgings – There was pain at times – No P. L., T+3. O. D. excavated.

On section the sclera were seen to be thinned and stretched in the ciliary region and at the posterior pole – The Cornea was prominent from stretching. The iris, atrophied but not adherent to the cornea, followed the staphyloma of cornea forward. The stretching of the coats of the eye had enlarged the circumlental space, but left the lens in situ. The vitreous was clear but fluid. The retina ~~are~~ and choroid were in their normal positions but adherent to one another and showed large patches of pigmentary disturbance. No doubt the initial cause of tension in this case was the modification of the fluids secreted in the interior of the eye as well as the inflammatory exudations from the affected area, but we can readily imagine as well that the inflammatory trouble being so near the canal of Schlem &c. may by its direct extension into this area have exercised a decided influence in retarding the fluid circulation, and this condition became intensified by the subsequent stretching and thinning

"Centre each chart with "pointer" at Zero before

LEFT.

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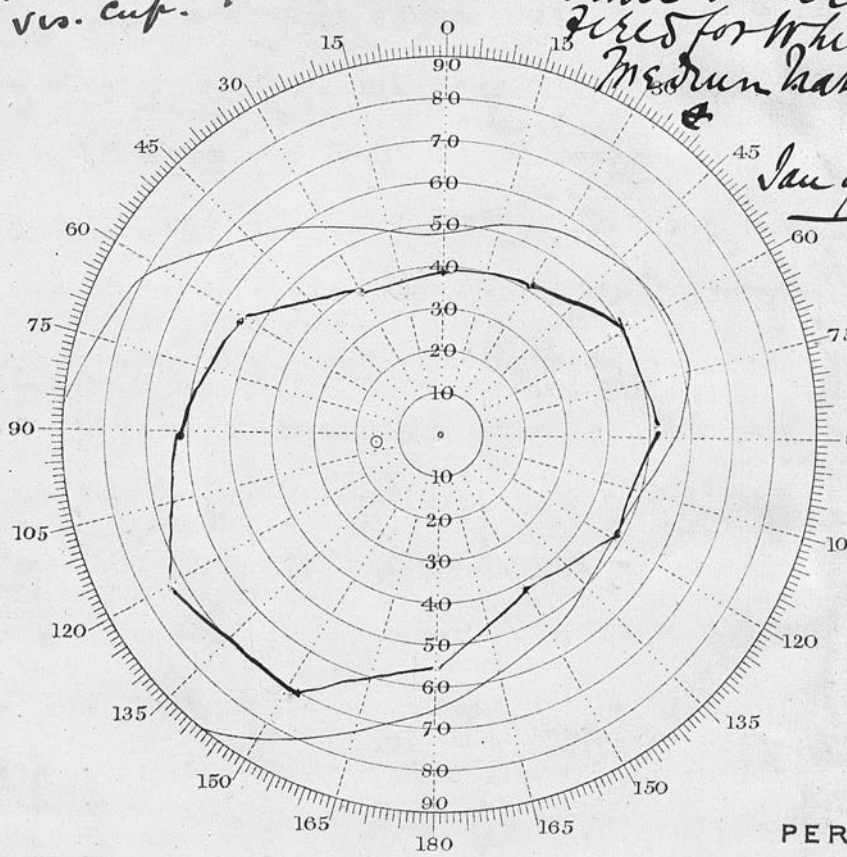
no vis. cup.

anno Dasler
Tested for White
McGuen Nat. Light
&
Jan 9/96



PERIMETE

The eccentric continuous red line indicates the average normal Fiel

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of the whole ciliary region.

As an example of a much more common kind of case we may consider A. F. who came under my observation for the first time in August 1893 with interstitial keratitis in both eyes – Two months later she complained of increase of pain in the left and said she saw colored rings around the lights – tension was then not markedly increased, but was greater than in the left. As she was using atropine it was discontinued and two weeks later the pupil had become active. The anterior chamber was deep: but tension had further increased and was now considered to be + 1. Paracentesis was performed with considerable relief and was repeated on two occasions subsequently. Keratitis punctata was not noticed until the increase of tension had shown signs of abating – Her field of vision taken about this time was somewhat contracted at nearly all points (see chart). When I last saw her (6.4.94.) she had in every way improved. The pain is very greatly diminished and the sight improved. The A. C. is good – There is no K. P. but one can still appreciate a fullness in the tension of the globe.

The field of V. (See chart) remains about the same. There is no visible cupping of the O. D., and with

"Centre each chart with pointer at Zero"

V = 6/9 parts + 3 fairs

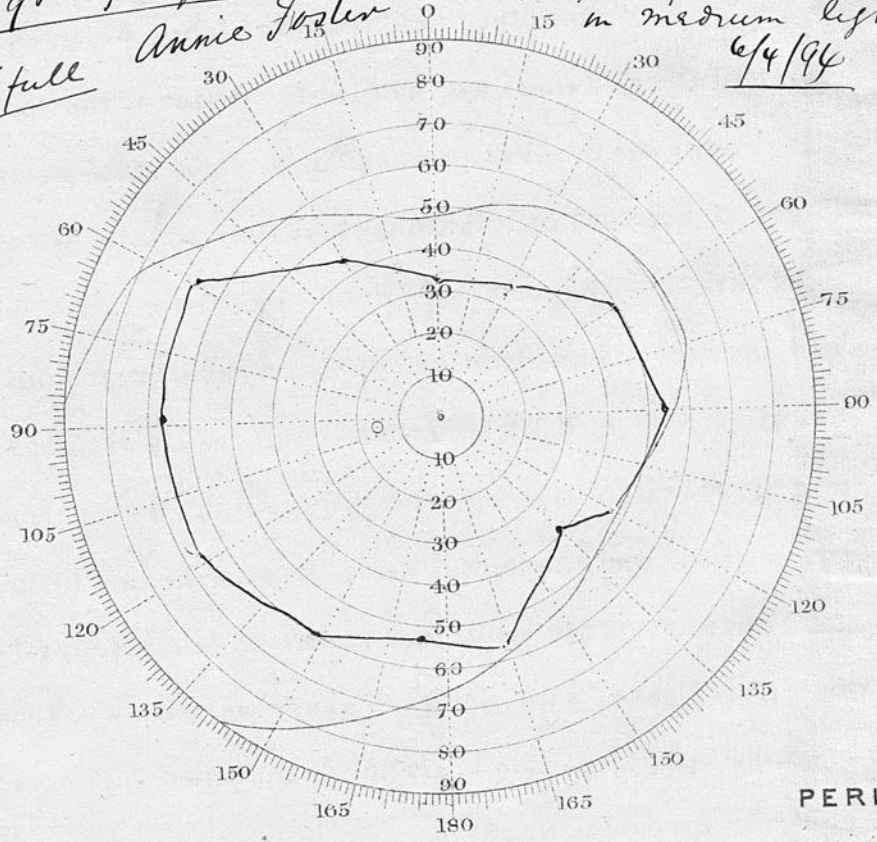
LEFT.

Fixed for while
c 2 cm. square
m medium light

Annie Fowler

6/4/94

T fuller



PERIMET.

The eccentric continuous red line indicates the average normal fie

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the exception of a slight haze of the cornea, the media appeared clear.

Such a case though it was but a mild one, exemplified the benefit that may be obtained from tapping the a. c. and keeping the tension from progressively increasing. In so doing we not only relieve the pain temporarily but preserve the retina and O. N. from the results which prolonged increase of tension, if it be at all severe, is bound to result in. Beyond the above treatment the patient had only Syrup of the Iodide of Iron and a lotion for the eyes.

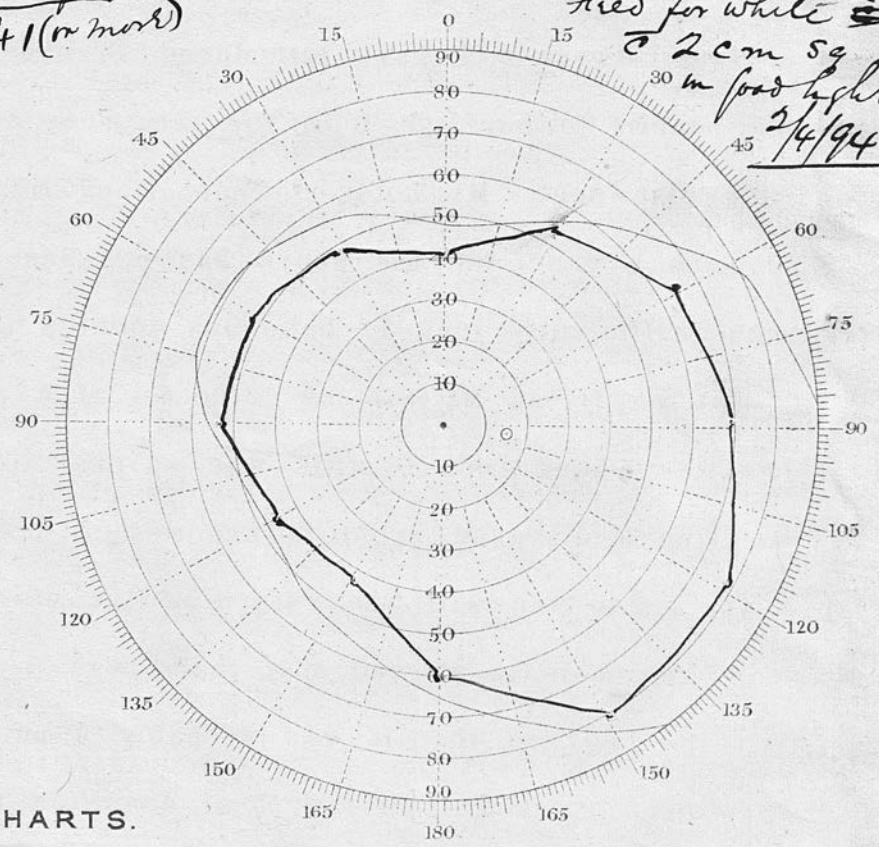
E. F. is another case we may consider suffering from Irido-Cyclitis. – There was slight Pericorneal injection. Her cornea and aqueous were hazy. Keratitis punctata was well marked. The anterior chamber was deep: The P. sluggish semidilated and with a Post Synechia below – There was considerable pain to touch. She complained of loss of vision increasing for two weeks or so, and " spots floating in front of eye". The V. = fingers at six inches. –T +1 (or more). The field is but slightly contracted (chart). There had been a previous trouble in the eye one year before which she had recovered from. No fundus details could be made out now.

commencing to use the Automatic Registration".

Counts fingrs at 6 inches
T+1 (or more)

RIGHT.

Ellen Fowler 31
Fixes for while
2 cm sq
in good light
2/4/94



ER CHARTS.

ld of Indirect Vision, the small red circle the position of the blind spot.

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She was also suffering from a large indolent looking, mesially placed, ulcer of posterior pharyngeal wall (late secondary Syph.)

This case I have introduced as one that may recieve benefit to her eye from the treatment of a local condition elsewhere. My notes do not afford me an example of such a case, and the above has not been under treatment sufficiently long to base any opinion upon the result, but my friend Mr. Silcock tells me of a case in his practice where ~~Indo-~~ Irido Cyclitis was several times cured by curetting a diseased Syphlitic Endometrum, only to relapse again however, with the return of the uterine condition. —This at least showed that there was a connection between the two, and that it was probably some form of blood poison, absorbed from the local condition, that gave rise to the ocular disorder, and it is possible also that the class of cases benefited by the administration of turpentine as advised by Mr. Tweedy may subsequently be found to be those originating either as the result of some form septic absorption from a diseased area in another part of the body, or possibly to a disordered condition of the blood itself in such cases.

In considering these cases of disease of the Ciliary region, one is struck by the large size of the field that is maintained even after a considerable degree of increase of pressure has existed for some time, while a case of bombé iris will exhibit within a very short time an extreme degree of limitation though the tension as juged by the finger is not markedly increased. (see previous charts) This is a condition which I have several times noticed and of which I am not able to offer any satisfactory explanation. —

It is true that there is not a complete blockage in these cases of Irido-Cyclitis: some filtration still goes on no doubt, notwithstanding the obstruction, but the same can be said of the bombé-iris cases, or it is probable we would meet with more cases of acute inflammatory mischief at the time the blocking takes place.

Again there is a material degree of difference in the vision in the two classes of cases.

The Bombé case maintains some considerable degree of useful vision for a time, while the Cyclitic case becomes rapidly and seriously defected.

Again if the Bombé condition be not relieved at an early date, vision though it be temporarily improved by Iridectomy, is more apt to deteriorate in time, while the Cyclitic case tends to improve and may even become

perfect again.

Much of this is no doubt explained by the condition of the media and the amount of opacity that may be present in such cases. But the rise of tension within the globe exercises I believe a much greater power for evil in bombé cases than those of Serous-Iritis.

In coming to a conclusion in regard to this condition it is evident they all cannot be treated on the same lines – We have considered their peculiarities at the end of each case and have now only to emphasize the benefit that can often be obtained from frequent tapping of the anterior chamber when increasing circumstances demand it. – So we relieve at once the tensive pain of the patient, and remove the pressure which is being exerted on the retina at least for a time, and place the eye under the most favorable circumstances till the inflammatory trouble is quieted down by constitutional and other treatment; and then we should endeavour to fortify the patient against subsequent attacks by such liberal diet and specific or tonic remedies as is advisable in each particular case.

Coming now to another condition we may consider the influence of nodular thickenings of the Iris on the tension of the eye. I have never seen as well marked a case as Mr. Eales showed in April 1882. (at the Midland Branch of the B. M. A. 1882) where "a patient in whom gummatous nodules of large size had formed very rapidly in both irides and had caused absolute Glaucoma in one eye." The other eye was at that time on a fair way to recovery: but the case of A. M. may be considered as an example—She was a hereditary syphilitic who had been unable to see with the left eye for years. — A week before it became inflamed, and when seen there was a general congestion of the globe with corneal haze. P. dilated (to 6 M M) and inactive (no blow or mydriatic) T + 2, a. c. shallow. Eserin had no effect. The lens was opaque and grey, there was perception of concentrated light only. Microsopically at the margin of the Cornea there was some small celled infiltration and some formation of capillary vessels in its tissue. ——The angle of the anterior chamber was blocked by an adhesion of the iris to the cornea. In some sections there was a large and sharply defined collection of small round cells at the root

of the iris, and smaller collections in the substance of the iris. Elsewhere, while the anterior endothelium of the iris was particularly well marked, and in some places was detached. The pupillary margin of the iris was adherent to the lens capsule at points, and the epithelium of the inner surface of the capsule many layers in thickness. There was considerable disturbance of retina and choroid at various points, and in places the whole of the uveal tract had been destroyed. There was no cupping of O. D.

There is here, well marked evidence of recent inflammatory trouble, and this was doubtless the origin of the glaucomatous condition that was set up, though old trouble in the eye had no doubt influenced the course of events to some extent.

The point, however, to which I wish to draw attention is that the nodular mass of round cell formation had by its thickening of the iris encroached upon and obliterated the iritic angle at that point, and this resulted in the rest of the iris being drawn forward against the back of the cornea as well, and causing the acute symptoms.

The treatment of these cases is diffucult and often very unsatisfactory.

Happily it is rare for such a condition to arise in an otherwise healthy eye. —It is more common in previously diseased eyes where past inflammatory trouble and often a debilitated constitution place all likelihood of even a satisfactory termination as a remote possibility.

Beside the above I have seen but two other cases, both hereditary syphilitics as well — and of about the same age (15 years) as the detailed case. Their affection was of a much less acute nature.

Paracentesis, which was considered sufficient in one case, was performed eight times or more after which the eye became quiet and tension did not tend to rise again to any extent, but the eye was so diseased otherwise as not to expect much visual improvement. —In the other case iridectomy, while it lowered the tension to nearly normal, was followed by the exudation of lymph and so left the V. as before (counts fingers). —

Subsequent treatment has been entirely medicinal.

We may find cases at times where inflammatory material or blood clot, thrown out into the anterior chamber, does not become absorbed but remains there, to become organized, and blocking the infiltrated angle, gives rise to increased tension. Of such a case the following is an example: -

W. W., age 29, complained of pain lately in R. eye, the sight of which had been failing for four years. There had been no injury (Syph. seven years ago).

Now, no p. l., T + 1 (or more): Dusky ciliary injection, P. widely dilated and inactive: posterior synechia below: Lens partly opaque. There is a rusty deposit at bottom of A. C. which can be traced round a good part of the Iritic angle, and a projection of a like nature runs up to the synechia.

On section the retina was seen to be detached and cystic, the vitreous shrunken, and O. D. deeply cupped.

Microscopically there is considerable adhesion of the root of the iris to the posterior surface of the cornea, and on the anterior surface of lower half of iris at the periphery, there is a new membrane formed, composed chiefly of round cells and blood vessels. — There is also some organized inflammatory tissue in upper part of

the iris.

The cause that gave rise to this condition is uncertain; but the pathological change, resulting in increased tension is easily understood by the obliteration of the Iritic angle as a result of the organisation of the material thrown out, and so causing an adhesion of iris to the cornea.

The only treatment that can be of use in such a case is Iridectomy, and the earlier it is done the better: but such an eye is likely to recover but very imperfectly if the Iris does not come away well toward the periphery. In fact we must recognise the possibility that new exudation or blood clot may again organize and leave the condition as bad as before.

A case of Bupphthalmos might also be mentioned here: – M. W. age 11 had suffered a year previously from interstitial Keratitis, she now had no p. l. and T was +2.

The cornea was seen to be opaque, irregular, and conical but no localized Staphyloma of the tunics of eye was present beyond the general enlargement of the globe. There was no change other than that the Iris was adherent to the posterior surface of the cornea. round the whole peri-

phery.

Here again, the only rational treatment that the pathological examination of the eye could suggest, is removal of a sector of the Iris at as early a stage as possible and so prevent the adhesion taking place, and possibly in the future it will be considered but right to make the corneal incision at the opposite side from which the sector of Iris is to be removed, so that we may thereby drag the root of Iris away from the cornea during its removal and not as we now do over the edge of the wound.

The case of J. M. (aet. 45), now under observation I find difficulty in placing in any of the above class of cases. His right eye has been failing gradually for six months but has only been painful of late. The cornea is nebulous (old I.K.) The a. c. shallow, the Iris atrophied and dull looking, – The P. is not dilated – it is active and there are no synechiae. T is +2 – He counts fingers at one meter (this was the better eye). The disc can not be well made

out, but there is considerable massing of the pigment at the periphery of the fundus.

The globe is under the normal size but equal to the left: (the L. shows considerable change in cornea, Lens, vitreous and choroid; its V. = $\frac{1}{60}$)

Eserin contracted the pupils well but made no alteration in the tension – in fact it was thought to have increased it, and so Paracentesis was performed with great relief to the patient and improvement of V. but two weeks later though his tension was again increasing (+1) V= $\frac{5}{60}$

At a later date it was again necessary to tap the a. c. from increasing T. and pain and decrease of V.

Internally the patient is taking iodide of Potash and continuing the use of Eserin locally.

The question of course arises here, how far is his increase of tension due to syphilis at all –

We however, will not argue that point here, as the treatment would in all probability be the same. Paracentesis is at present maintaining his V. in a fairly satisfactory state while his condition can be watched for a time, but the distinctly shallow chamber is in favour of the fact that Iridectomy will have to be resorted to in the end, not-

withstanding that Eserin keeps his pupil well contracted.

In his "Diseases of the Eye and Ear" (P. 170) Mr. Hutchinson makes mention of a patient aet. 24 the subject of hereditary syphilis with hazy corneae, thinned Sclerotics, and enlarged pupils, who had suffered from T+ and whose trouble had lasted for nine months. His discs were cupped and white – the vessels were small and showed arterial pulsation. His V. was very imperfect and he could not sleep for tensive pain. Iridectomy gave improvement for a time, but pain recurred and sight began to fail again.

Here again, from the evidence afforded, it might be questioned if the real causes were of specific origin but whether it was or was not that treatment which Pathology and experience show to be the best for either condition was performed, and failure no doubt only resulted from the advanced condition of affairs which no operation or treatment could relieve.

In conclusion there is but little to add. In all cases where Iridectomy will become necessary the sooner it is done the better, and this is particularly so in cases of recurrent Iritis, where repeated attacks not only may form new adhesions, but often a quiet form of Inflammation goes on between the more acute stages without pain, and without

the knowledge of the patient, and so ends in the complete exclusion of the pupil –

For such cases we must be on our guard, and resort to prophylaxis : and this means Iridectomy and that only.

Another thing we must recognise, and that is that our patient may get too much Iodide, and too much Mercury. When one of these drugs has begun to disagree the other often does so as well, and combined I believe they may give rise in certain individuals after a prolonged course to loss of flesh and a general feeling of malaise, without showing signs of either Iodism or Merurialism – In such cases Iron, Quinine, Strychinine, and plenty of milk quickly bring the patient back to his former self again and so prove of great benefit to the local trouble as well.